U.S. Citizenship and Immigration Services

Non-Precedent Decision of the Administrative Appeals Office

In Re: 41810670

Date: MAR. 26, 2026

Appeal of Service Center Operations (SCOPS) Decision

Form I-140, Immigrant Petition for Alien Workers (National Interest Waiver)

The Petitioner, a process engineer, seeks employment-based second preference (EB-2) immigrant classification as a member of the professions holding an advanced degree, as well as a national interest waiver of the job offer requirement attached to this classification. *See* Immigration and Nationality Act (the Act) section 203(b)(2), 8 U.S.C. § 1153(b)(2).

SCOPS denied the petition, concluding the Petitioner did not establish that he is eligible for or otherwise merits a national interest waiver as a matter of discretion. The matter is now before us on appeal. 8 C.F.R. § 103.3.

The Petitioner bears the burden of proof to demonstrate eligibility by a preponderance of the evidence. *Matter of Chawathe*, 25 I&N Dec. 369, 375-76 (AAO 2010). We review the questions in this matter de novo. *Matter of Christo's, Inc.*, 26 I&N Dec. 537, 537 n.2 (AAO 2015). Upon de novo review, we will dismiss the appeal.

I. LAW

To establish eligibility for a national interest waiver, a petitioner must first demonstrate qualification for the underlying EB-2 visa classification as either an advanced degree professional or an individual of exceptional ability in the sciences, arts, or business. Section 203(b)(2)(B)(i) of the Act. Once a petitioner demonstrates eligibility for the underlying classification, the petitioner must then establish eligibility for a discretionary waiver of the job offer requirement "in the national interest." Section 203(b)(2)(B)(i) of the Act. U.S. Citizenship and Immigration Services (USCIS) may grant this discretionary waiver of the required job offer, and thus of a labor certification, when it is in the national interest to do so. *Matter of Dhanasar,* 26 I&N Dec. 884, 889 (AAO 2016), provides the framework for adjudicating national interest waiver petitions. *Dhanasar* states USCIS may, as matter of discretion,[1] grant a national interest waiver if the petitioner demonstrates that:

- The proposed endeavor has both substantial merit and national importance;
- The individual is well-positioned to advance their proposed endeavor; and

[1] *See Flores v. Garland*, 72 F.4th 85, 88 (5th Cir. 2023) (joining the Third, Ninth, Eleventh, and D.C. Circuit Courts of Appeals in concluding that USCIS' decision to grant or deny a national interest waiver to be discretionary in nature).

- On balance, waiving the job offer requirement would benefit the United States.

Id.

II. ANALYSIS

For the underlying EB-2 immigrant classification, SCOPS concluded that the Petitioner qualifies as a member of the professions holding an advanced degree.[2] The issue on appeal is whether the Petitioner established that a waiver of the requirement of a job offer, and thus a labor certification, would be in the national interest. SCOPS determined that the Petitioner did not establish meeting any of the three prongs of the *Dhanasar* analytical framework. Upon de novo review, we agree with SCOPS' determination that the Petitioner did not establish the national importance of his proposed endeavor under *Dhanasar's* first prong.[3]

On appeal, the Petitioner argues that SCOPS' decision failed to consider a totality of the evidence and adjudicate the petition using the preponderance of the evidence standard of proof. In particular, the Petitioner asserts that SCOPS did not properly assess his proposed endeavor, and the decision lacked reasoned consideration and analysis of all arguments and evidence submitted in support of his endeavor's national importance, in particular evidence he submitted with his request for evidence reply. He argues that the evidence clearly demonstrates that his proposed endeavor would have potential broader impacts beyond his employer. Given the extensive documentation submitted, including reports, articles, letters of recommendation, and opinion letters, he claims he has met his burden to show his endeavor's potential broad impact on his field, the U.S. economy, the environment, and national security.

To determine whether a petitioner has met their burden under the preponderance of the evidence standard, we consider not only the quantity, but also the quality (including relevance, probative value, and credibility) of the evidence. *See Matter of Chawathe*, 25 I&N Dec. at 376.; *see also Matter of E-M-*, 20 I&N Dec. 77, 79- 80 (Comm'r 1989). Here, the proposed endeavor, as described, and the evidence in the record do not support the Petitioner's assertions that the potential impact of his endeavor having a broader impact to his field or implications rising to a level of national importance.

The first prong of the *Dhanasar* analytical framework, substantial merit and national importance, focuses on the specific endeavor that a petitioner proposes to undertake. *Matter of Dhanasar,* 26 I&N Dec. at 889. The endeavor's merit may be demonstrated in a range of areas, such as business, entrepreneurialism, science, technology, culture, health, or education. In determining national importance, the relevant question is not the importance of the field, industry, or profession in which the individual will work; instead, we focus on the "the specific endeavor that the foreign national proposes to undertake" and the prospective impact of the proposed endeavor, instead of limiting our analysis to a petitioner's employment at the time of filing. *Id.*; *see generally* 6 *USCIS Policy Manual* F.5(D)(2), https: //www.uscis.gov/policy-manual. An endeavor is more specific than a general

[2] To qualify for the underlying EB-2 classification as an advanced degree professional, the Petitioner submitted his diploma and academic transcript indicating he earned a master of science in chemical engineering from [redacted] in [redacted] New York. Based on the evidence, the Petitioner has established he is an advanced degree professional.

[3] While we may not discuss every document submitted, we have reviewed and considered each one.

occupation and should include details of the types of work a petitioner intends to undertake and describe specific projects and goals. *See generally* 6 *USCIS Policy Manual*, *supra*, at F.5(D)(2).

In his statement, the Petitioner explains that for his master's degree thesis, he researched and designed a membrane reactor for hydrogen production which converted ammonia into pure hydrogen. He has co-authored published research papers and a book chapter about ammonia-based hydrogen reactors and their potential industrial applications and presented his work at a chemical engineering industry conference. Since earning his master's degree, he has worked in the United States as a process engineer for two engineering consulting firms.

The Petitioner states that his proposed endeavor is to research membrane reactors for hydrogen production, storage, and transportation with plans to develop and commercialize two products: an ammonia-based hydrogen membrane reactor and low-carbon hydrogen retrofits at steam methane reformer and autothermal reformers. While he plans to continue working for a U.S. company as a process engineer, he emphasizes that his work as a process engineer is not his proposed endeavor. Instead, he states that his employment will "provide [him] with a network of contacts of possible future clients and collaborators" while developing the skills needed to commercialize nascent carbon capture and hydrogen technology.

However, the Petitioner's description of his proposed endeavor is not sufficiently detailed to understand and meaningfully consider whether it is of national importance. While he explains his intent to research, develop, and commercialize an ammonia-based hydrogen membrane reactor and low-carbon hydrogen retrofits, his description lacks specific details and evidence to support his claims that his endeavor would have a potential broad impact rising to the level of national importance. Instead, the Petitioner's statements and supporting evidence mainly focus on how his previous research for his master's thesis and his current employment responsibilities would provide him with the knowledge, skills, and contacts necessary for his intended research, development, and commercialization of a membrane reactor and low-carbon hydrogen retrofits.

With his request for evidence reply, the Petitioner submitted a statement briefly explaining his future plans, stating:

> I plan to commercialize my ammonia-based hydrogen membrane reactor. Specifically, I plan to translate my Pd-Ag-Y membrane-reactor work into a portable, skid-mounted ammonia-to-hydrogen system that produces fuel-cell grade (ie. 99.9999% pure) hydrogen on demand for remote, off-grid agricultural loads (e.g., irrigation pumps, cold-storage backup, remote sensors and emergency power). Many farms already handle anhydrous (free from water) ammonia; using it as a hydrogen "carrier" avoids high-pressure hydrogen trucking and enables reliable power where grid access is limited or unstable. My role will be to finalize the process design, controls and safety basis, build a 10-30 kWe prototype, and field-test it with a cooperative farm. The intended outputs are a validated design, an operations playbook, and a service model for module replacement.
>
> Next, I plan to commercialize low-carbon ("blue") hydrogen retrofits at steam methane reformer (SMR) and autothermal reformers (ATR). The reaction yields

> carbon dioxide, carbon monoxide and hydrogen. Further, the carbon oxides and hydrogen will be separated from each other using membrane. By doing that carbon capture and pure hydrogen generation occur simultaneously. I would provide front-end engineering design (FEED) package (Aspen models, process flow diagrams, piping and instrumentation diagrams, and energy requirements) that natural gas refineries and chemical plants will use later for detailed design and ultimately construction. This project effectively unifies my two interests —carbon capture and hydrogen energy — while offloading the need to obtain substantial capital and installation materials onto teams. The goal is to lower natural gas plants' carbon intensity.

The Petitioner indicates that he has been approached to conduct research on membrane reactors for hydrogen products but did not provide any further evidence about the prospective research. In addition, he notes that development of a durable, industry-grade product which attracts investment will take time, but he has not explained or offered evidence about the development of his intended products. While the Petitioner provided a general summary of his future plans for his proposed endeavor, as discussed above, he has not sufficiently explained his proposed research, or how the research would relate to his proposed development and commercialization of the products.

As a comparison, the petitioner in *Dhanasar* demonstrated that he conducted research and development in the field of air and space propulsion, more specifically, hypersonic propulsion systems involving speeds above Mach 5, and he had developed a novel method for accurately calculating hypersonic airflow. *Matter of Dhanasar*, 26 I&N Dec. at 891-92. In addition, he submitted evidence reflecting that he would continue his research into designing and developing propulsion systems in nano-satellites, rocket-propelled ballistic missiles, and single-stage-to-orbit vehicles and substantial supporting evidence of how his continued research would assist the United States in maintaining its advantage over other nations in hypersonic flight, including documentation reflecting his receipt of funding from a government entity for his research. *Id.*

Here, the Petitioner has not provided the level of focus or documentation described in *Dhanasar* to support his claims that his proposed endeavor has the claimed potential to impact his field, national government policies, the U.S. economy, national security, and the environment. A petitioner must support assertions with relevant, probative, and credible evidence. *See Matter of Chawathe*, 25 I&N Dec. at 376. The Petitioner has not done so here. While working as a process engineer and researching membrane reactors and low-carbon hydrogen retrofits with a goal of scaling the development and commercialization of the products for clean energy production, storage, and transportation may demonstrate the substantial merit of the proposed endeavor, it does not support or demonstrate its prospective potential impact nationally, or even globally, or through broader implications rising to a level of national importance.

The Petitioner argues that SCOPS failed to consider letters from professionals in his field, which he claims show the national importance of his proposed endeavor. The Petitioner submitted a letter from his employer explaining his work responsibilities and the projects he is working on for the company. His employer states that the Petitioner's work "supports nationally recognized priorities in carbon management and clean-energy infrastructure and has implications that extend beyond a single client." However, the Petitioner's statements clearly indicate that his employment as a process engineer is

separate from his proposed endeavor. Moreover, his employer only briefly mentions the Petitioner's proposed endeavor, stating his research is "focused on dense-metal (Pd-Ag-Y) membrane reactors for ammonia decomposition to hydrogen." His employer does not detail the Petitioner's proposed research, development, and commercialization of a membrane reactor and low-carbon hydrogen retrofits, or its potential impact. Instead, his employer mainly discusses the company's carbon capture projects and the Petitioner's work assignments, while noting that the Petitioner's work will provide him with foundational knowledge and skills for his research.

In addition, the Petitioner submitted letters from colleagues in his field to support his claims of national importance. An opinion letter from the vice president of technology at a gas separation membrane manufacturing and systems design company explains that although he has not worked with the Petitioner, he reviewed his work with his employer, opining that the Petitioner meets the three *Dhanasar* prongs. The letter discusses the United States' focus on increasing the capture and storage of CO2 and lowering the cost of clean-hydrogen and low-carbon fuels by using "innovative capture approaches like membranes at fleet scale," which "would materially advance U.S. carbon-management" and clean energy goals, benefits extending beyond a single employer. The letter, however, does not discuss the Petitioner's research, development, and commercialization of such innovative technologies or products. Instead, the letter only briefly mentions the Petitioner's endeavor, generally indicating his intent to advance membrane-enabled clean energy technology. The opinion letter emphasizes that the Petitioner is one of the few engineers with combined "laboratory membrane expertise (dense-metal H2 membranes) with large-plant retrofit know-how (retrofit of existing power plants for CO2 capture)" which "positions him uniquely to drive membrane-enabled clean energy technology forward." However, the Petitioner's professional skills and knowledge mainly relate to whether he is well-positioned to advance his endeavor under *Dhanasar's* second prong.

Similarly, additional letters from the Petitioner's colleagues mainly reference his previous work and make brief mention of his intent to conduct research on membrane reactors for hydrogen production and carbon reduction. For instance, a letter from the Petitioner's thesis research advisor generally indicates that the Petitioner's proposed research in hydrogen production is of national importance and has potential to influence the energy and industrial sectors. His research advisor discusses his previous research work and attests to his research skills, claiming his research contributes "to key advancements in ammonia decomposition for hydrogen production." Another colleague letter discusses being familiar with the Petitioner's work based on him co-authoring a book chapter on ammonia decomposition in membrane reactors. The colleague indicates that the Petitioner has "potential to make a lasting impact on the field" with "its practical applications and strong potential to drive sustainability in the U.S. energy sector." However, the letters do not identify or address his specific proposed endeavor in meaningful detail. While the letters may help to understand the Petitioner's background and endeavor, the letters' focus on the Petitioner's previous research and professional knowledge and skills mainly relate to *Dhanasar's* second prong, as noted above.

Next, the Petitioner claims that his proposed endeavor has the potential to impact national government policies and initiatives recognizing the importance of supporting green energy production, clean hydrogen production, and reduction of carbon emissions for economic, environmental, and national security purposes. In particular, he emphasizes that his research, development, and commercialization of membrane reactors and low-carbon hydrogen retrofits aligns with national policies and initiatives

which incentivize clean energy resources and mitigate hazardous emissions, such as the One Big Beautiful Bill Act (OBBA), The Inflation Reduction Act (IRA), and policies by the U.S. Department of Energy and the U.S. Environmental Protection Agency (EPA).

To support his claims, the Petitioner submitted articles, reports, and U.S. government policies relating the effects of climate change and the benefits of clean hydrogen policies. For instance he provides articles and reports relating to extreme weather and climate change causing higher food prices, home insurance costs, climate migration, and conflict; U.S. long-term strategy to attain net-zero greenhouse gas emissions by 2050; assessment of climate and clean energy provision in the IRA; expected acceleration of clean hydrogen adoption due to the IRA; how industries move toward low-carbon; potential impact of a future hydrogen economy; decarbonizing the global shipping industry; shipping ammonia; U.S. support of hydrogen industry; tax credits for clean energy under OBBB; U.S. Department of Energy report on progress in hydrogen and fuel cells; EPA report linking air pollution and childhood asthma; impacts of climate change on health; carbon capture technologies supporting power system transition to low-carbon power sources; risks of United States losing carbon capture advantage; and support for hydrogen-powered naval warfare. This evidence, however, does not mention the Petitioner's specific proposed projects and their potential impact on the field or on such national initiatives and policies.

While USCIS recognizes specific evidentiary considerations relating to science, technology, engineering, and mathematics (STEM) degrees and fields, "the evidence must demonstrate that a STEM endeavor has both substantial merit and national importance." *See generally* 6 *USCIS Policy Manual*, *supra*, at F.5(D)(2). We acknowledge the overall value of the field of process engineering, the hydrogen energy industry, attracting qualified professionals in related careers, and strengthening our nation's technology and clean energy resources, particularly technology and clean energy resources recognized as critical and emerging, but their overall significance does not establish the national importance of the Petitioner's proposed endeavor in particular. *See id.* Moreover, the growth and importance of an industry are not sufficient to meet the national importance requirement under the *Dhanasar* framework. Instead of focusing on the importance of an industry or field, or a shortage of workers in a field, we focus on the "the specific endeavor that the foreign national proposes to undertake." *Matter of Dhanasar,* 26 I&N Dec. at 889.

The Petitioner has not sufficiently detailed his proposed research, development, and commercialization of membrane reactors to understand how it would advance STEM technologies with sufficiently broad potential implications for his field rising to the level of national importance. Being employed as a process engineer and gaining knowledge and skills to advance his research, development, and commercialization of a membrane reactor and low-carbon hydrogen retrofits is insufficient to establish national importance. The Petitioner has not sufficiently detailed his proposed endeavor with supporting evidence to understand how it would advance STEM technologies with sufficiently broad potential implications rising to the level of national importance.

In *Dhanasar*, we determined that the petitioner's teaching activities did not rise to the level of having national importance because they would not impact his field more broadly. *Id.* at 893. We noted that "[a]n undertaking may have national importance for example, because it has national or even global implications within a particular field, such as those resulting from certain improved manufacturing processes or medical advances." *Id.* at 889. Beyond general assertions, the Petitioner has not

demonstrated with sufficient corroborating independent and objective evidence that the research he proposes to undertake offers the claimed innovations that contribute to advancements in his industry or otherwise would have broader implications for his field or the nation commensurate with national importance. The claimed potential impacts of his endeavor depend on numerous factors, and the Petitioner did not offer a sufficiently direct evidentiary tie between his proposed work and the claimed potential impacts.

SCOPS further determined that the Petitioner did not establish that he is well-positioned to advance the proposed endeavor under *Dhanasar's* second prong, or that, on balance, it would be beneficial to the United States to waive the requirements of a job offer, and thus of a labor certification under *Dhanasar's* third prong. Because the documentation in the record does not sufficiently establish the Petitioner qualifies for the first prong of the *Dhanasar* precedent decision, he has not demonstrated eligibility for a national interest waiver. This identified basis for dismissal is dispositive of the Petitioner's appeal, and therefore we decline to reach and hereby reserve the Petitioner's appellate arguments and eligibility under the second and third prongs of *Dhanasar*. *See INS v. Bagamasbad*, 429 U.S. 24, 25 (1976) (noting that "courts and agencies are not required to make findings on issues the decision of which is unnecessary to the results they reach"); *see also Matter of L-A-C-*, 26 I&N Dec. 516, 526 n.7 (BIA 2015) (declining to reach alternative issues on appeal where an applicant is otherwise ineligible).

III. CONCLUSION

As the Petitioner has not established eligibility under the requisite first prong of the *Dhanasar* analytical framework, he is not eligible for a national interest waiver as a matter of discretion. The appeal will be dismissed for the above stated reasons.

ORDER: The appeal is dismissed.

NOTICE: This constitutes the final decision in this matter. The filing of a motion will not postpone the effect of the decision. 8 C.F.R. § 103.5(a)(1)(iv). Aliens who are not lawfully present, or who are otherwise inadmissible or deportable, may be subject to the commencement of removal proceedings under section 240 of the Act through the issuance of a Form I-862, Notice to Appear. Those proceedings may result in their removal from the United States and possible ineligibility for future visas or other immigration benefits.